

CALIFORNIA ECONOMIC STRATEGY PANEL

WORKFORCE DEVELOPMENT AND EDUCATION POLICY ISSUE COMMITTEE

SUMMARY

Background

The members of the California Economic Strategy Panel defined the following four policy issue areas that are critical for the growth and competitiveness of the state's economy:

- Workforce Development and Education Policy Committee (Senator Vasconcellos, Donald Fowler, Bill Simmons, and Amy Dean);
- Economic Data and Information Policy Committee (Donald Fowler and Bill Simmons);
- Infrastructure Policy Committee (Senator McPherson, Jerold Neuman, Ricky Laster, Lee Pearson and Vincent Chong); and,
- Governance and Regionalism Policy Committee (Sunne Wright McPeak and Araceli Ruano).

The members agreed to meet with technical advisors to review statewide and regional policy reports in each of the above areas and discuss the role, if any, the California Economic Strategy Panel can play. The result will be a two-year workplan beginning in January, 2003.

The following provides a summary of the discussion and recommendations for the workplan by the Workforce Development and Education Policy Committee on September 10, 2002.

SUMMARY OF DISCUSSION

Numerous policy reports on workforce development and education have been completed in recent years (refer to CESP Workforce Development and Education Matrix). Common themes in the policy reports that are of interest for the work of the California Economic Strategy Panel include:

- Link the education, workforce preparation and economic development systems statewide;

- Provide opportunities for education and training for all Californians that go beyond categorical funded programs;
- Continuously provide data and information on the industrial base and employment patterns and facilitate greater efficiency and coordination in gathering and distributing useful information that more accurately describes the economy.
- Address California employers' need for state assistance to attract and retain (vs. training) skilled workers.
- Address whether California employers are less interested in tax credits and development subsidies (rebate on property taxes) than in a qualified labor pool and lifestyle/quality of life.
- Focus of the workforce development system should be more on building communities, rather than solely focusing on the unemployed.
- The California Economic Strategy Panel should challenge statewide systems to give customers what they need, when they need it.
- There is a need to make investments that result in collaboration of categorical programs; in the current Workforce Investment Act system, there is no financial incentive to collaborate, as opposed to simply participate or co-locate.
- The observation was made that the categorical system of workforce development programs is probably incapable of systemic reforms, or cannot respond to systemic changes. The Workforce Investment Act does provide the Governor and the Workforce Investment Board the authority to spend money differently although some states have taken creative steps.

RECOMMENDATIONS

The Workforce Development and Education Committee proposed the following recommendations:

- Define the California Economic Strategy Panel's role as the convener of key players and executives to provide intellectual leadership and continuously define a vision of the California economy.
- Introduce legislation that will provide accountability for the workforce development system by defining goals, identifying the players, and insisting the players come to the table to help design, in statute, the basic components of the system, as well as provide accountability measures.
- Establish a Business Advisory Board or regularly hold forums with representatives from state business and industry organizations (e.g. California

Business Roundtable, California Chamber of Commerce, California Technology and Manufacturing Association and Education Roundtable), regional business leaders, educators (e.g. County Superintendents and Proposition 10 County Commissioners) and Local Workforce Investment Board members.

- The California Economic Strategy Panel should define a policy statement that shows how the four policy issues converge and are the critical policy areas for the future growth and competitiveness of the California economy.
- Establish a formal relationship between members of the California Economic Strategy Panel and members of the California Workforce Investment Board and designate a member of each to regularly attend the others' meetings.
- Organize a communications/media strategy when the final California Economic Strategy Panel report for this current biennial cycle is completed in December 2002.

TECHNICAL ADVISORS:

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CALIFORNIA ECONOMIC STRATEGY PANEL WORKFORCE DEVELOPMENT & EDUCATION POLICY ISSUES

Report (Author, Title, Affiliation, Date, Internet Link)	Overview	Key Findings	Key Recommendations	Status/Evaluation	Recommendations for Role of the Panel
<i>Strategic Plan for FY 2002-2003</i> , California Workforce Investment Board, June 2002, www.calwia.org	The California Workforce Investment Board was appointed by the Governor in 1999 to provide policy recommendations regarding all aspects of the State's implementation of the federal Workforce Investment Act (WIA), including the provision of integrated services and program accountability. It is also responsible for establishing the vision and goals for California's overall workforce investment system, and developing and promoting policies to facilitate statewide and local system building between workforce education and economic development. The Board oversees the implementation of the delivery system at the local level by local Workforce Investment Boards, One-Stop Career Center operators, and other	<ul style="list-style-type: none"> The Board recognizes that a comprehensive workforce development system is critical for sustainable economic growth and improved quality of life for all Californians. It is a central means to increase widely shared prosperity, decrease poverty, and support the leadership position of the California economy. Its scope is the entire workforce development and investment system, and not just WIA-funded activities. The Board's most valuable role is to lead by informing and leveraging action and supporting its partners. The State's biggest investment opportunity is in providing all workers with new and upgraded skills, rather than work first, and creating a system for all workers. Adequate economic and workforce information is lacking to base investment decisions on training for the "jobs of the future." Categorical funding and programs make it difficult to build a comprehensive workforce development system. Current performance measures and outcomes are driven by external program and reporting needs rather than communities, regions, workers and businesses. Capacity building is needed at the state and local levels to improve performance and outcomes. 	<ul style="list-style-type: none"> Ensure that all partners have the most timely, relevant information about changing workforce needs and investment opportunities, at the local, regional and statewide levels. Be an effective partner and advocate, especially for the local WIBs, and bring system partners together, especially through a unified planning process for the benefit of the entire "system." Support, nurture and reward a "culture of innovation, including design of an innovation fund and by leveraging other resources for partners. Raise the quality of the "field of practice" and performance of the overall system, through identification of best practices, capacity building, etc. Ensure timely compliance with all WIA requirements and conduct board capacity building, including evaluation of strategic plan outcomes. 	The Board is working with staff and partners to attain each goal area (five). Current initiatives are being integrated into the work plan. The Board has also created a Council of Economic Advisors to assist with policy development and analysis of key economic and workforce issues, and has a new interagency agreement with the Technology, Trade and Commerce Agency to provide regional economic base analyses, key industry cluster assessments, and other economic information. The creation of the new Labor and Workforce Development Agency is an additional opportunity to enhance data-driven workforce investment policy for the State.	The Panel could provide input and guidance to the Secretary of the Labor and Workforce Development Agency, Council of Economic Advisors and the Board's economic goal Working Group. The Panel could focus on identifying and understanding emerging workforce needs through its own analysis and outreach.

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	partners. This plan is an outcome of the Board's strategic planning seminar held in February 2002, and describes what it will do to improve the State's workforce development system over the coming year.				
<i>Shared Prosperity and the California Economy</i> , Steve Levy, Center for the Continuing Study of the California Economy, for the James Irvine Foundation, 2001, www.Newccsce.com	This report recommends a new approach to workforce preparation to meet the requirements for continued growth in the California economy based on productivity growth, move up strategies for individual workers, partnerships instead of single agency programs and adoption of a common purpose with respect to workforce preparation.	<ul style="list-style-type: none"> • Productivity growth is driving the California economy. • Higher wages are the result of productivity growth. • Productivity growth is the result of technology innovation and investment. • California is a leader in technology innovation and investment. • There is a shortage of skilled workers in many sectors. • This shortage provides an opportunity for move up strategies. 	<ul style="list-style-type: none"> • Develop a comprehensive workforce preparation investment plan and implementation system. • Increase funding for California's workforce investment system. • Adopt career ladders as a State Workforce Investment Board priority. • Create innovative career ladder programs with Local Workforce Investment Boards and partners. • Compile labor market information related to career ladders. • Compile information on existing career ladder programs and best practices. 	This report provides an excellent overview of the challenge for California in workforce preparation and presents specific recommendations that can serve as a framework for the development of an investment plan. It has received wide circulation among workforce preparation and economic development organizations of the state and local level. The author has made numerous presentations to these groups and has been involved in meetings where policy decisions regarding workforce development were being discussed. While some of the specific recommendations have been incorporated in the policy positions of stakeholders the message of the report has not been fully recognized or reflected in state policy.	The Panel could assess the recommendations in this report and consider state policy recommendations.
<i>California Workforce Development: A Policy Framework for Economic Growth</i> , State Interagency Advisory Group, 2000	The Regional Workforce Preparation and Economic Development Act (RWPEDA) of 1997 - later reenacted in 1998 under Senate Bill 1744 - was a unique effort to bring education,	<p>The plan defined the basic expectations for the workforce development system as follows.</p> <ul style="list-style-type: none"> • Support economic growth. • Respond to economic and social changes. • Accommodate new directions in public policy. • Respond to individual needs for lifelong 	<p>The plan recommended public policies and systems policies for implementation as follows.</p> <p>Public Policies:</p> <ul style="list-style-type: none"> • Workforce development services designed and organized to provide California's workers and employers with the skills and knowledge they need to 	This report provides a sound basis on which to develop and initiate policies and programs that meet the needs of the California workforce and California employers. Unfortunately, State workforce preparation and economic development policy makers, including the four organizations that carried out the program have largely ignored this	The Panel could work with the California Workforce Investment Board to develop state policies to implement appropriate recommendations in this report.

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	workforce preparation and economic development partners together at the state and regional levels. The goal of the Act was to create an integrated, effective, and responsive workforce development system. Among the vehicles required by the act was the preparation of an integrated workforce development plan by the Health and Human Services Agency, Technology, Trade and Commerce Agency, the Chancellors Office of the California Community Colleges and the State Board of Education. The plan includes a <i>policy framework</i> based on <i>guiding principles</i> recommended by the four state organizations.	<p>learning, self-sufficiency, and career advancement.</p> <ul style="list-style-type: none">• Be effective at the community, regional and state level.• Ensure that the major components of the overall system-education, workforce preparation, and economic development – will in themselves be effective and accountable.• Work as a system, not a collection of programs.• Provide common measures for the success of those programs, sub-systems, and the system itself.• Be administered through comprehensive state and regional partnerships that involve all key players, work through consensus, and expand to accommodate new partners.• Empower local leaders to exercise leadership in problem solving, planning and utilization of resources.• Continuously improve through the application of quality management principles.• Use resources efficiently.• Provide measurable returns on investment of public funds.• Engage the private sector in workforce policy and systems development.	<p>sustain and encourage the growth of California’ economy.</p> <ul style="list-style-type: none">• Universal access to workforce development information and services that enable all Californians to enter employment, advance in their careers, and achieve the quality of life they desire.• Public education that is the foundation of the workforce development system, to provide Californians with the fundamental skills and lifelong learning opportunities they need for career advancement and personal fulfillment.• Efficient and effective use of public resources to provide workforce development services acceptable to both those who use them and those who pay for them.• A structure based on the authorities and responsibilities of established governing and advisory bodies and administrative agencies. <p>Systems Policies:</p> <ul style="list-style-type: none">• Expand the state partnership required by the Regional Workforce Preparation and Economic Development Act to reflect the full scope of workforce development.• Sustain and expand collaboration among workforce development policy bodies and service providers including social support services.• Engage the private sector as full partners in every aspect of workforce policy and systems development, program operations, and delivery of services.• Incorporate a “move up” strategy within all segments of the workforce	report. It is particularly significant that the State Workforce Investment Board has not seriously considered either the findings or the recommendations of the report for incorporation in their state investment plan.	

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			<p>development system to continuously improve the knowledge and skills of every person in the labor force and ensure opportunities for career development and increased earnings.</p> <ul style="list-style-type: none">• Support local development of regional boundaries for workforce development systems and service delivery methods.• Remove fiscal, eligibility and other regulatory requirements that create barriers to accessing services.• Expand accountability for program results and systemwide outcomes to ensure continuous improvement in service delivery.• Continue and expand existing systems development initiatives as the foundation for regional and statewide systems.		
<i>Evaluation of the Regional Workforce Preparation and Economic Development Act, Final Report</i> , Berkeley Policy Associates, June 28, 2002	This report of the RWPEDA program evaluates the regional collaborative, state level collaboration and the policy framework document. It provides lessons learned and recommendations regarding each of the three activities.	<p>Regional Collaborative:</p> <ul style="list-style-type: none">• The process of applying for RWPEDA funding itself promoted collaboration.• Establishing a new collaborative structure rather than building onto pre-existing organizations proved to be a useful strategy in developing a shared vision among all participating partner agencies.• Independent project managers were key to promoting collaboration.• Consensus decision-making with equal authority given to all participating stakeholders builds trust and credibility for the collaborative.• Collaboration requires agency representation by staff with decision-making authority as well as the time and resources to implement these decisions.• Successful project planning and implementation requires timely and	<p>Important lessons were learned from RWPEDA implementation. Chief among these was the value of collaboration and the potential it holds for improving and integrating workforce development efforts. In order to guide policymakers, administrative staff, and other stakeholders in building on the RWPEDA-initiated momentum and sustaining the vision of an integrated state workforce development system, the report offers a series of state- and regional-level recommendations based on experience gained through the RWPEDA efforts.</p> <p>State-Level Recommendations:</p> <p>Gain the formal commitment of the Governor, State Legislature, and workforce development partners to the vision of an integrated workforce development system as articulated in the <i>Policy Framework</i>.</p>	This favorable evaluation of the RWAPDA program and the Policy Framework discussed above highlights the lessons learned and provide guidance to workforce preparation stakeholders in the development of new and more relevant approaches to workforce preparation. The report is being circulated for review, but it is unclear how the document will be used for shaping workforce preparation policy for the coming years.	The Panel could assess lessons learned from this report and consider state policies.

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		<p>predictable access to funds.</p> <ul style="list-style-type: none"> Increased state-level technical assistance and support may have decreased delays in accessing funds caused by approval processes. Categorical funding-focused on specific target populations, delivery locales, and direct service requirements-limits system-change efforts. The most successful collaboratives were those that kept participants focused on the ultimate goal of collaboration for service improvement and systems change. Collaboration can be improved through implementing formal communications mechanisms. <p>State-Level Collaboration:</p> <ul style="list-style-type: none"> Collaboration in working to create a responsive and effective statewide workforce development system is valuable. Initiatives like RWPEDA depend on support from the highest levels of authority, coupled with a critical mass of support from non-appointed positions. Collaboration is fragile and requires hard work. Consensus decision-making builds trust among partner agencies. It is important to have all key stakeholders represented at the table. Collaboration requires the commitment of real resources. Developing an MOU between workforce development partners is valuable both for the development process itself and for the resulting document. 	<p>Re-establish a forum in which workforce development system partners meet to conduct policy discussions and joint planning to improve the system as a whole, such as through the Workforce Council proposed by the Governor's Workforce Development Review and Reform Task Force.</p> <p>Ensure that all critical stakeholders in the workforce development system are included in system-building efforts, such as the California Employment Development Department, additional postsecondary education partners, partners representing the business community, and representatives from employee associations.</p> <p>Support regional collaboration with flexible funds, minimizing restrictions such as those that typically accompany categorical funding</p> <ul style="list-style-type: none"> Offer technical assistance and best practices to support regional collaboration. Take the next step toward integrated planning among the state-level workforce development partners, building on current momentum and commitment. Use the <i>Policy Framework</i> to guide future workforce development collaboration and system building. <p>Regional-Level Recommendations:</p> <ul style="list-style-type: none"> Establish a collaborative entity that is organizationally separate from the collaborating partners. A new level of bureaucracy or large organizational structure is not necessary to achieve collaboration. However, clearly defined roles and responsibilities for joint efforts--distinct from those of any 		

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		<ul style="list-style-type: none"> Funding provided to promote regional collaboration should be conducive to collaboration and system building and should be consistent over time. <p>Policy Framework Document:</p> <ul style="list-style-type: none"> Establishing the equality of partner agencies is conducive to meaningful collaboration. Getting participants on the same page at the outset can prevent misunderstandings and make collaboration more efficient. Ensuring that reviewers have the opportunity to make substantive contributions may increase buy-in to the process and its outcomes. Phasing activities properly can create “learning loops” that benefit individual stages of the collaborative process. Proper and careful wording is crucial to building consensus and reaching multiple audiences. Securing buy-in from detractors can increase support for collaborative work and potentially strengthen its legacy. A policy framework document that is created collaboratively and addresses important themes in depth can have wide applicability. 	<p>particular partner or existing organization-is essential.</p> <ul style="list-style-type: none"> Value and cultivate the regional knowledge base, sharing organizations' perspectives, experiences, protocols, best practices and technical assistance. Develop methods to keep the primary focus of the collaborative on the goals of collaboration and system change. Require some type of buy-in from all partners, evidenced by actual resource allocation. Provide Incentives for participants to stay involved, despite job changes or revised priorities. Contract with an independent facilitator and/or project manager to guide regional collaboration, providing an unbiased perspective and keeping partners focused and engaged. Develop a sustainability plan for regional collaboration, addressing goals, benchmarks, funding, and private sector involvement and investment. Solicit input and feedback from stakeholders on an ongoing basis in order to develop a deeper understanding of local needs and priorities and to assess collaborative efforts. Develop methods for distributing and publicizing information about workforce development services and resources to business, job seekers and the general public. 		
<i>Ladders of Opportunity: Board of Governors' Initiative for Developing</i>	The Board of Governors of the California Community Colleges in a retreat	To meet the diverse needs of the California economy and its citizens, a career ladders approach should be implemented which would address the following workforce	The California Community College System is well positioned to take the lead in development of a career ladders approach to workforce preparation through	The current state budget situation is having an impact on the implementation of these recommendations.	The Panel could explore the recommendations with the Board of Governors.

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<i>California's New Workforce</i> , California Community Colleges, July 2001	held in February 2001 identified six priorities to which their attention will be directed in the forthcoming year. This document focuses upon a new initiative in the second of these areas, workforce development. The document recognizes that the employment requirements of the New Economy are placing new and stringent demands on the community colleges and recommends an approach that focuses on career ladders as the best way to meet those new requirements.	preparation requirements: <ul style="list-style-type: none"> • Target high wage, high growth sectors of the economy such as health and information technology, readying individuals to achieve economic self-sufficiency in the areas of greatest need. • Provide for full spectrum of education and training, beginning with basic literacy and numeracy, continuing with entry-level job skills and extending through advanced training and general education. • Provide a variety of learning and training opportunities including certificate programs, employer funded training and degree programs. • Integrate academic and career skills and knowledge, providing the broad educational foundation, as well as the career specific skills, needed to help students succeed in the long term. • Integrate work and learning, allowing individuals the opportunity to obtain education and skill development while pursuing work and career. • Provide lifelong education and training opportunities allowing individuals to return for continued learning and skill development and any stage of their career. 	implementation of the following recommendations: <ul style="list-style-type: none"> • Allocate and integrate current resources based on the career ladders approach. • Provide needed technical assistance through the Chancellor's office. • Develop common performance measures. • Create an innovation fund. • Develop an action plan for collaboration with other entities. 		
<i>Only a Beginning: The Proposed Labor and Workforce Development Agency</i> , Little Hoover Commission, 2002, www.lhc.ca.gov	In March of 2002, Governor Davis proposed the creation of a new Labor and Workforce Development Agency composed of the Department of	The reorganization plan offered by the Governor identified the major benefit of the proposal as coordination among the programs that will be under the umbrella of the new agency and describes the plan as the first step toward eliminating duplication, increasing efficiency and promoting accountability and access to programs. Three areas were	The review recommended that the new agency: <ul style="list-style-type: none"> • provide a detailed plan including performance measures in next years budget. • strengthen the influence and accountability of the Workforce Investment Board. 	Despite reservations due to a lack of detail, the Little Hoover Commission recommended that the plan be allowed to take effect. The Task Force appointed by the Governor rendered no report and the Legislature took no action in either house. Therefore, the proposed new agency became operational on July 1,	The Panel could explore future roles with Secretary Steve Smith of the Labor and Workforce Development Agency.

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	Industrial Relations (DIR), the Employment Development Department (EDD), the State Workforce Investment Board (WIB) and the Agricultural Labor Relations Board (ALRB). In addition to the reorganization plan, the Governor in the 2002-03 budget plan proposed far-reaching changes to improve the organization and management of the workforce development system. Under state law, the Little Hoover Commission must review the plan and the Legislature must either allow the reorganization to go into effect, or stop it by a majority vote of either house. A task force was appointed by the Governor to provide additional details regarding the reorganization proposal.	<p>stressed:</p> <ul style="list-style-type: none"> • Better coordination of diverse workforce development programs operated by various units of state government • Improvement in the enforcement of labor laws through the coordination of investigative efforts. • Coordination of data collection and analysis efforts for improved decision making by employers, program administrators and policy-makers. <p>The analysis by the Little Hoover Commission agreed with these findings, but felt that the proposal provided too little detail for analysis and didn't go far enough to meet the objective of the proposed reorganization.</p>	<ul style="list-style-type: none"> • align goals, incentives and performance measures. • provide close coordination with the Cal Works program. • expand on integration of investigation and enforcement functions. • develop a research agenda and reduce barriers to access of employment data. • consider inclusion of additional adjudicatory boards in the new agency. • integrate workforce and economic development efforts. 	2002. The head of the Department of Industrial Relations was named to head the new Agency as Secretary of Labor.	
<i>Critical Path Analysis of California's Science and Technology Education System</i> , California Council on Science and Technology (CCST), April, 2002,	CCST, in response to growing concerns about the supply of science and technology workers for California's High-tech industries produced a Critical Path Analysis of California's	<p>The K-12 System:</p> <ul style="list-style-type: none"> • The overall attrition rate is too high and among those who do graduate too few meet the requirements for college, particularly in science and math. • Low college attendance rates for minorities will further reduce college participation rates overall as this 	<p>K-12 System:</p> <ul style="list-style-type: none"> • Allocate additional resources to low-performing schools to strengthen quality of teaching and increase educational/career counseling. • Work to improve the quality of California's reading, science, mathematics, and technology teaching. 	The report has been published and circulated to appropriate stakeholders in the workforce preparation profession. It provides guidance to the problems associated with insuring the quality and availability of scientists and engineers to meet the needs of California employers which should be reflected in	The Panel could explore future roles with CCST.

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www.ccst.us	science and technology education system. The CCST Critical Path Analysis Committee prepared the report. Six studies were commissioned, focusing on individual segments of the educational pipeline (K-12, college and continuing education), demand for workers in the science and technology sector, and the digital divide. Key findings and recommendations were presented for each segment of the education system and the two issues given specific attention.	<p>participation rates overall as this population becomes the majority in K-12.</p> <ul style="list-style-type: none"> • There is a growing shortage of qualified teachers in science and math compared to other states and support services are inadequate (e.g., counselors and librarians). • Improving teacher quality, particularly at low performing schools, is an important key to improving student performance. • Teacher’s salaries are not competitive with the labor market, and are particularly low in science and math. <p>The Community College System:</p> <ul style="list-style-type: none"> • The number of S&E certificates and degrees granted is insufficient. • The number of transfers to four-year institutions is too low. • The community colleges are not meeting the need for providing bridges to work of further study for at risk high school students. • S&E instructional capacity (lab, facility, teacher) is resource limited. • The supply of counseling services is inadequate. • There is no salary differential for faculty in S&E disciplines, despite the higher earning potential of S&E degree recipients in the labor market. <p>Baccalaureate Schools:</p> <ul style="list-style-type: none"> • California is not producing enough baccalaureates in S&E. • There is a gap between degree production and workforce demand. • California lags behind other states in per 	<p>mathematics, and technology teaching.</p> <ul style="list-style-type: none"> • Develop strategies to motivate students to fulfill the basic requirements necessary to enter college and pursue science, mathematics, and technology majors. • Develop strategies to increase student access to effective academic and career counseling. <p>Community College:</p> <ul style="list-style-type: none"> • Give greater priority to expansion of S&T enrollments and degrees in the allocation of incremental new state operating and capital budget funds. • Increase cooperation of community colleges with high schools. • Increase transfer numbers in the S&T areas. • Strengthen collaboration with four-year institutions. • Promote high-end articulation efforts such as ASSIST, CAN and IMPAC. • Increase opportunities for part-time degree study in the state’s universities to compete with community college transfer students who are working full and part-time. • Develop differential salary scales for S&T faculty that reflect the marketplace for these skills. <p>Baccalaureate Level:</p> <ul style="list-style-type: none"> • Achieve targeted increases in the number of S&E Degrees. • Develop more appropriate funding and budget allocation strategies for the S&E programs in the CSU and community colleges. 	the workforce preparation plans of all providers and the overall Investment Plan developed by the State Workforce Investment Board.	

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		<p>capita production of S&E degrees and rate at which BS recipients pursue graduate degrees.</p> <ul style="list-style-type: none">• The recent efforts to increase the number of S&E degrees awarded are insufficient.• Poor exposure to S&E careers in K-12 leads to inadequate preparation and low interest in S&E careers.• The attrition rate at CSU is too high (close to two thirds).• CSU does on have a differential salary scale for S&E disciplines, despite earnings differentials.• A rise in biology degrees in the past 10 years has obscured the decline or stagnation in engineering, computer science, mathematics, and physical science degrees awarded. <p>Graduate Schools:</p> <p>Masters Level:</p> <ul style="list-style-type: none">• Masters degrees are in significant demand as shown by the numbers of H-1B workers who hold them.• Growth in S&E master's degrees is largely driven by the increasing participation of women in the health and life sciences.• A significant percentage (over 35%) of master's degrees are awarded to non-resident aliens, many of whom are not products of the California education system. <p>Doctoral Level:</p> <ul style="list-style-type: none">• PhDs are very important to economic growth.• A small number of top schools in	<ul style="list-style-type: none">• Continue to expand higher education outreach, teacher education and professional development initiatives.• Provide the research-related start-up costs (for laboratories, etc.) associated with hiring of new and replacement faculty.• Improve counseling availability and guidance for students to appropriately plan course sequences.• Recognize and support the pivotal role of the community college system for transfer students.• Improve the alignment of K-12 learning outcomes with university placement assessment expectations.• Encourage the federal government to raise caps on Pell Grants, and further increase the state's own Cal Grant program. <p>Masters Level:</p> <ul style="list-style-type: none">• Encourage more California students to pursue graduate education to the master's level.• Increase graduate enrollment rates for students who entered university as community college transfers.• Expand terminal/professional master's degree options within UC and CSU, and encourage it in the independent institutions.• Encourage closer connection to industry in graduate training programs. <p>Doctoral Level:</p> <ul style="list-style-type: none">• Encourage more California students to pursue graduate education to the PhD level.		

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		<p>California are responsible for the majority of innovation.</p> <ul style="list-style-type: none">• Although California has many top research schools in the UC System and independent sector, comparatively low level of financial support is available making recruitment difficult.• Non-resident aliens earn over 30% of S&E doctorates.• There is an increasing number of PhDs in relatively low paying jobs due to the academic orientation of their skills. <p>Continuing Education:</p> <ul style="list-style-type: none">• Continuing education providers play a vital and often unrecognized role in qualifying generally educated students with industry specific skills.• Typically these programs reflect local industry workforce needs but are not tracked sufficiently at the state level.• State programs do not sufficiently support continuing education.• There is a significant lack of regional demographic data on the effects of continuing education on the science and technology workforce. <p>Workforce Immigration:</p> <ul style="list-style-type: none">• California employers hire foreign-born workers as a solution to shortages of skilled domestic workers.• Individuals with graduate degrees receive a high percentage (41%) of H-1B visas and the balance holds a BS or its equivalent.• The rise in the use of foreign-born workers underscores the inability of the California education system to produce	<ul style="list-style-type: none">• Improve doctoral completion rates for underrepresented populations.• Improve preparation for PhDs to enter industry in fields such as biological sciences and physics, for example, through programs involving industrial internships. <p>Continuing Education:</p> <ul style="list-style-type: none">• Assign a state entity to comprehensively analyze the continuing education system.• Reassess the state's role in continuing education.• Encourage industry to expand support for employee participation in continuing education.		

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		<p>enough skilled labor.</p> <p>The Digital Divide:</p> <ul style="list-style-type: none"> • Use of computers and the Internet is becoming a critical life skill. • The digital divide is not just an issue of resources; it is also an issue of training. • California's high number of under-qualified teachers, especially in low-performing schools, severely impacts the effectiveness of placing computers in the classroom. 			
<p><i>Workforce Preparation and Business Linkages, Strategic Planning Group, Final Report, The California Master Plan for Education, 2nd Draft, July 2002, Joint Committee to Develop a Master Plan for Education-Kindergarten through University, www.sen.ca.gov/masterplan</i></p>	<p>In 1999 the Legislature passed Senate concurrent Resolution 29, calling for the creation of a new Master Plan for Education. The Master Plan for Education will serve as a roadmap for providing a coherent educational system that is attentive to learner needs, literally from birth through old age. The Master Plan is being developed by the Joint Committee to Develop a Master Plan for Education-Kindergarten through University. A number of Strategic Planning Working Groups, including one for Workforce Preparation and Business Linkages</p>	<p>The working group adopted two guiding principles:</p> <ul style="list-style-type: none"> • Focus on all students. • Focus on the best interests of the students. <p>As an initial step toward envisioning what a future system might look like, five precepts for effective programs in workforce preparation were agreed on.</p> <ul style="list-style-type: none"> • Target jobs with relatively high earnings, strong employment growth, and opportunities for individual advancement. • Include an appropriate mix of academic (including basic or remedial) education, occupational skills, and work-based learning. The intensity of both academic and vocational education is appropriate to the jobs, and effective programs pay attention to the pedagogy of everything they teach. • Provide appropriate supportive services. • Provide students with pathways or "ladders" of further education opportunities. • Collect appropriate information about 	<p>The Working Group presented recommendations in five specific areas:</p> <p>Academic Integration:</p> <ul style="list-style-type: none"> • Integrate academics and career preparation throughout K-12. • Extend School-to-Career (STC) concept across K-University. • Increase resources for career guidance and assistance to students. • Expand recruitment for counselors and workforce teachers. • Improve Professional Development for Counselors and Teachers. <p>Alignment:</p> <ul style="list-style-type: none"> • The state should establish specific roles and responsibilities for a statewide system of career/workforce preparation programs in education. • The alignment of career technical programs should be broad in scope. • The structure of a career/workforce preparation system should reflect a tightly-coupled network model, characterized by relatively autonomous 	<p>The Joint Committee has held hearings on the 1st draft of the Master Plan and comments have been solicited on the 2nd draft. The Joint Committee website has extensive information on the study including reports, comments received and hearing transcripts.</p>	<p>The Panel could explore future roles with the Joint Committee to Develop a Master Plan.</p>

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	were appointed to study and report on selected issues. The Workforce Preparation and Business Linkage Working Group was completed earlier this year.	results and use these to improve their quality.	<p>nodes of education/training providers, intermediary industry, trade and professional organizations; strategic connections to the labor force; and a high level of communications among network members.</p> <p>Accountability:</p> <ul style="list-style-type: none">• The state should expand the current workforce report card to include K-University programs.• The state should expand student data collection systems and link to postsecondary institutions and Employment Development Department (EDD).• The state should focus some portion of post secondary funding on program/certificate/degree completion, time to completion, and education/labor market outcomes rather than only enrollment. <p>Resources:</p> <ul style="list-style-type: none">• Any proposed funding model must recognize its formula for adequacy of: The cost of recruiting, education and professional development for staff in career technical programs and career technical learning strategies; and, the costs associated with the instructional facilities and equipment required to deliver instruction in career technical programs.• Consideration should be given to granting the educational segments flexibility in their internal allocation of funds to address the higher costs associated with career, technical and		

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			<p>scientific instruction and contextual zed learning more broadly.</p> <ul style="list-style-type: none"> Specifically: the differential costs of recruiting, education and retaining teachers, faculty and support staff in career, technical and scientific disciplines; the differential costs associated with the instructional facilities and equipment required to deliver instruction in career, technical and scientific fields; and the differential costs associated with contextual zed learning, including laboratories, field and applied industry experiences. <p>Private Postsecondary</p> <ul style="list-style-type: none"> The Joint Committee should conduct a review to determine the most efficacious and effective placement of governance for the Bureau for Private Postsecondary and Vocational Education (BPPVE). 		
<p><i>A State of Diversity: Demographic Trends in California's Regions, from California Counts, Population Trends and Profiles</i>, Hans Johnson, Public Policy Institute of California, May 2002, www.ppic.org</p>	<p>The Public Policy Institute of California publishes periodic assessments and updates of trends and changes in California's demographic characteristics. This report uses recent data from the 2000 Census to examine demographic trends and patterns in California's nine regions. It emphasizes the importance of understanding</p>	<ul style="list-style-type: none"> California gained over 4 million residents in the 1990s, due to international immigration and natural increase, with natural increase the largest component of population change in every region except the Sierras. Six out of every 10 Californians live in Southern California, with the Inland Empire gaining in demographic importance. Population growth rates in the 1990s were higher for inland than coastal areas, but almost three out of four Californians live in coastal areas. The three fastest growing regions – the Inland Empire, Sacramento Metro and San Joaquin Valley – accounted for 	<ul style="list-style-type: none"> The commonalities suggest that many of the growth issues faced by California as a whole are felt throughout the state. Strong differences are also evident, with the most disturbing being the divergence of per capita incomes in California's regions, with relatively poor regions becoming even poorer. The differences present a challenge to state policy makers – regions might not share common objectives, or might be pitted against one another. 	<p>PPIC is continuing to track and update this information.</p>	<p>The Panel could ensure that strategies account for regional differences and address regional equity issues, consider targeting of investment resources for regions where disparities are increasing or promote housing production to match job growth.</p>

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	California’s regions, and notes the recent PPIC Statewide Survey finding that a substantial majority of Californians believe that local governments should take a regional approach to working on land use and growth issues. The regions used vary somewhat from those of the Economic Strategy Panel. The report highlights the differences in density throughout the regions (e.g., 9 persons per sq. mile in the Sierras, compared to 1,959 in the South Coast), and how many regions are the equivalent of other states in geographic size and/or population.	<p>almost 40% of the population growth, but the South Coast added over one million new residents.</p> <p>Similarities:</p> <ul style="list-style-type: none">• Every region experienced slower population growth than it had in the 1980s, due to the impact of the severe recession in the early 1990s.• Diversity is spread through the state – in every region, population growth was greatest for either Hispanic or Asian and Pacific Islander populations.• In three of the nine regions, no race or ethnic group is a majority of the population.• In every region except the Far North, housing growth has not kept pace with population growth. <p>Differences:</p> <ul style="list-style-type: none">• Despite rapid increases in Hispanic and Asian populations, the Far North and the Sierras are overwhelmingly non-Hispanic White, whereas in the South Coast, Hispanics are the single largest ethnic group.• Sources of population growth vary: the South Coast, Bay Area, San Diego, Central Coast, and San Joaquin Valley receive international migrants and send out domestic migrants, while all other regions receive more domestic than internal migrants.• Age structures differ: the Inland Empire and San Joaquin Valleys have very young populations and the Sierras and the Far North have much older populations.• Economic conditions diverge: the Inland Empire and the San Joaquin Valley are			

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		<p>the poorest (and two of the fastest growing) regions, and are falling further behind the rest of the state.</p> <ul style="list-style-type: none">• Much of the state’s migration appears to be determined by regional economic conditions.			

**CALIFORNIA ECONOMIC STRATEGY PANEL
ECONOMIC DATA AND INFORMATION POLICY ISSUE COMMITTEE**

SUMMARY

Background

The members of the California Economic Strategy Panel defined the following four policy issue areas that are critical for the growth and competitiveness of the state's economy:

- Workforce Development and Education Policy Committee (Senator Vasconcellos, Donald Fowler, Bill Simmons, and Amy Dean);
- Economic Data and Information Policy Committee (Donald Fowler and Bill Simmons);
- Infrastructure Policy Committee (Senator McPherson, Jerold Neuman, Ricky Laster, Lee Pearson and Vincent Chong); and,
- Governance and Regionalism Policy Committee (Sunne Wright McPeak and Araceli Ruano).

The members agreed to meet with technical advisors to review statewide and regional policy reports in each of the above areas and discuss the role, if any, the California Economic Strategy Panel can play. The result will be a two-year workplan beginning in January, 2003.

The following provides a summary of the discussion and recommendations for the workplan by the Economic Data and Information Policy Committee on September 10, 2002.

SUMMARY OF DISCUSSION

Common themes in policy reports reviewed by staff (refer to CESP Economic Data and Information Matrix) and key discussion points included the following:

- The panel should continue to do economic base analyses and identify what is growing and declining in the economy.
- There is a need for data at the right scale, presented in an understandable format; i.e., capacity, time and skills to analyze the data.
- Relevant, timely data availability will determine how the California Economic Strategy Panel can make meaningful policy recommendations.

- The Labor Market Information Division in the California Employment Development Department is currently building a new website, "Workforce Informer," that will include analyses and articles, in addition to data sets.
- Rather than talking about economic predictions or forecasts, the California Economic Strategy Panel should talk about probabilities in the economy.
- The California Economic Strategy Panel should interpret data, listen to industry leaders and tell the story about the dynamics and trends in the economy.
- The California Economic Strategy Panel should use existing statewide data systems to make good investment policies.

RECOMMENDATIONS

The Economic Data and Information Committee proposed the following recommendations:

- The California Economic Strategy Panel should ensure that the need for a database that is available, consistent and updated regularly is met.
- The California Economic Strategy Panel should ensure that the need for real-time economic information that enables Local Workforce Investment Boards to make timely policy decisions is met.
- The California Economic Strategy Panel should regularly produce a portfolio of economic information that would be useful for policymakers at the local, regional and state levels.
- The California Economic Strategy Panel should draft guiding principles for the provision and use of economic data.

TECHNICAL ADVISORS:

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CALIFORNIA ECONOMIC STRATEGY PANEL ECONOMIC DATA & INFORMATION POLICY ISSUES

Report (Author, Title, Affiliation, Date, Internet Link)	Overview	Key Findings	Key Recommendations	Status/Evaluation	Recommendations for Role of the Panel
<i>The Double Bottom Line: Investing In California's Emerging Markets</i> , California State Treasurer, May, 2000	The State Treasurer implemented a new initiative to “mobilize the power of the capital markets for the public purpose,” to address the widening disparity of economic opportunity across the State and its potential threat of “two Californias” by the State’s sustained success. The initiative follows on the 1999 report “Smart Investments” (The Treasurer’s Debt Affordability Report), which articulated policies to direct State infrastructure investments to focus on communities left behind and to deal with the challenges of growth. The initiative calls on the public sector – from pension plans to state and local governments – to invest capital to meet the double bottom line – achieving successful investment results and broadening economic opportunity in at-risk	<ul style="list-style-type: none"> Economic disparities increased during a time of economic advancement; a two-tiered economy threatens California’s long-term economic and social health. While some progress has been made on sustainable development strategies, addressing community revitalization still faces many challenges. Strategies are documented that show investment potential in many of California’s communities in need, including research by the Milken Institute and the Initiative for a Competitive Inner City, as compared with the volatility in overseas emerging markets. 	<ul style="list-style-type: none"> Public pension funds and investment pools should seek out sound investments in California’s emerging markets. Public financial resources and assets should leverage capital investment in economically struggling communities. State government, in partnership with local governments, educational institutions, foundations and the private sector – should spur capital investment in overlooked communities by funding critically needed market research. Private sector and foundation capital must join in partnership with the public sector in a new commitment to invest in these communities. 	<p>Some results as reported in the Treasurer’s Ideas to Action follow up report:</p> <p>Investment Initiatives: Redirection of funding for home loans for low and moderate-income Californians; more than \$1 billion invested in urban communities, including the addition of an urban core investment initiative to the CalPERS Real Estate Portfolio, and an urban real estate investment program by CalSTRS; a \$500 million investment fund targeted to businesses locating and expanding in underserved areas; and, increased state deposits in California community lending institutions.</p> <p>Community Development Initiatives: The Extra Credit Teacher Home Purchase Program; adoption of double bottom line criteria for California Infrastructure and Economic Development Bank funding; and, cleaning up of contaminated brownfield sites.</p> <p>The Treasurer’s Office is working to support the creation of regional community capital investment funds for communities in need. The State budget crisis and general economic slowdown have affected some initiatives.</p>	Collaborate with the Treasurer on economic development strategies to identify emerging market opportunities and reinvest in underserved communities.

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	communities. It calls on the private sector to invest in these “emerging markets.”				
<i>Maximizing Returns: A Proposal for Improving the Accountability of California’s Investments in Economic Development</i> , California Budget Project, 2002	A comprehensive overview of California spending on economic development through both “on-budget” programs and tax expenditures, broken out into eight categories. Includes a matrix of spending on each program from 1995-96 to 2000-01; a short description of each program; and a chart of evaluation/reporting requirements for each program. Also includes a brief discussion of how to define economic development, as well as a review of options for evaluating the effectiveness of economic development programs.	<ul style="list-style-type: none"> • The state lacks a structural framework for economic development spending. • Most economic development funds go to general support for business. • Tax expenditures account for the majority of economic development spending. • Most economic development spending is not evaluated. 	<ul style="list-style-type: none"> • Develop a unified economic development strategy. • Prioritize economic development spending on areas of strategic importance. • Institute a systematic review of tax expenditure programs. • Evaluate economic development spending based on outcomes. 	Senator John Vasconcellos, Senator John Burton and Assemblywoman Sara Reyes, and/or their staff, have expressed strong interest in the findings and recommendations of the report. Senator Vasconcellos in particular plans to follow up with legislation in the 2003 session.	<ul style="list-style-type: none"> • Initiate a strategic planning process for state economic development spending. • Initiate a review and evaluation of economic development tax expenditures. • Advocate for better evaluation and reporting requirements (and enforcement of current requirements) for on-budget programs. • Advocate for consolidation and/or coordination of on-budget economic development programs with overlapping functions.
<i>Planning for Shared Prosperity or Growing Inequality – an in-depth Look at San Diego’s Leading Industry Clusters</i> , Center on Policy Initiatives, 2000 Clusters of Innovation,	This report analyzes the nature of the jobs being created in the industrial clusters of San Diego’s New Economy. The report studies not only the number of jobs being created and	<ul style="list-style-type: none"> • The cluster industries are growing, but the majority of jobs remain in non-targeted and non-cluster industries. • Promoting targeted clusters does not decrease regional economic inequality. • Lower-skilled occupations are 	<ul style="list-style-type: none"> • Create “good,” full-time jobs with decent wages and secure benefits. • Turn “bad” jobs into “good” jobs by setting job quality standards. • Establish “Jobs Impact Reports” to evaluate job quality outcomes. • Develop industry specific systems of structured career ladders and skill 	The San Diego Region is at the forefront of industry cluster analyses and basing public policies on its findings.	The Panel can conduct a regional forum in the San Diego Region to evaluate its application on a state level.

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San Diego Regional Economic Development Corp. www.centerpolicy@igc.org	average incomes, it further analyzes the occupational composition of the clusters, the educational attainment for employment, the structure of earnings by cluster, the mix of full-time versus part-time employment, the clusters in which firms are likely to provide health insurance, where firms are located and the size of firms in cluster and non-cluster industries.	<p>increasing for the overall regional labor market.</p> <ul style="list-style-type: none"> • Educational attainment in both targeted and non-targeted cluster industries is decreasing, and there remains a robust demand for workers with only a high school degree or less in all industry categories. • Targeted and non-targeted clusters experienced dramatic increases in the percentage of part-time workers. • Targeted clusters provide health benefits at a higher rate than non-targeted and non-clustered industries, but a large number of workers have no coverage. • Targeted clusters are less likely to employ women and non-whites. • Declining unionization in the region has been driven by dramatic trends in targeted cluster industries. • The number of small firms far surpass that of large firms in all industry categories, however, more workers are employed by the larger firms. • The majority of clustered industry firms are located in North County while the working population resides largely in the southern area of the county. 	<p>development, paying special attention to creating entry points, pathways and clear career steps for communities left out of the current economic boom.</p> <ul style="list-style-type: none"> • Expand participation by workers and communities in regional economic development. 		
<i>Next Silicon Valley: Riding the Waves of Innovation</i> , Joint Venture: Silicon Valley Network, 2002	This initiative is led by a Next Silicon Valley Leadership Team, working to shape both a framework for understanding and communicating what is	<ul style="list-style-type: none"> • Silicon Valley is a “habitat” for innovation and entrepreneurship, with strong technology, human and capital assets and the largest concentration of technology firms in the world. • After robust job growth from 1994-2000, Santa Clara County lost 3.7% of its jobs 	<ul style="list-style-type: none"> • Leaders need to create a resilient region – one that can support people, companies, and communities as they mutually adapt to increased economic volatility. Inability to do so in the last cycle of growth led to costly job/skills mismatch, skyrocketing housing prices, a 	These white paper was followed up by “Preparing for the Next Silicon Valley: Opportunities and Choices,” which identifies the opportunities and risks associated with the technology convergence of biotechnology, nanotechnology, and information	Joint Venture is on the cutting edge of research on the changing economy and emerging industries, and how the community organizes itself to respond. The Panel could track and disseminate the findings of

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	happening in the Valley economy, and a process for engaging leaders in a regional discussion on opportunities and choices for the next wave of innovation.	<p>in less than one year. The “bust” mirrors the phenomenon of a “hype” curve, which often accompanies the introduction of a fundamentally new technology (in this case, the Internet).</p> <ul style="list-style-type: none"> • Silicon Valley has experienced other boom/bust cycles, each time emerging with the “next” Silicon Valley economy; adversity helped to stimulate the Silicon Valley habitat for major innovations • New waves of innovation are coming, including a deepening of information and communications technology in both economy and society as we move from the first phase of the Internet toward the mobile Internet, new productivity tools, and applications of technology in education, government and community. • Biotechnology is converging with information technologies, creating new opportunities in the emerging fields of bioinformatics, biomaterials, and biochips. • Nanotechnology is being commercialized. Silicon Valley has strengths in these emerging areas. • Increased global competition due to the accelerating speed of technology diffusion has led to great volatility for Silicon Valley firms and people. • Other regions are competing to lead the next waves of innovation. 	<p>falling standard of living for low-income households, and other threats to the region’s livability.</p> <ul style="list-style-type: none"> • Being a leading economic innovator requires a new commitment to social innovation – realigning workplaces, institutions, and infrastructure to new social and economic realities. • Specific recommendations include: developing a new technical workforce, mobility and support for low-income workers, building housing and strong neighborhoods, investing in early care and education, and connecting networks and building community. 	technology. The project is mapping Bay Area converging technology companies and research centers and labs. There are three action teams to address technology innovation, workforce/workplace innovation, and infrastructure in order to support technological and social innovation. A Workforce Study on “Connecting Today’s Youth with Tomorrow’s Technology Careers” was released in March 2002, If Silicon Valley does not prepare itself, and it could miss the next wave of innovation.	Joint Venture’s work.
<i>A Critical Analysis of the Local Biotechnology Industry Cluster in Alameda, Contra Costa, and Solano Counties</i> , June 27, 2002. Prepared by	Economic development, workforce and human services agencies from the East Bay counties of Alameda, Contra Costa and Alameda Counties and the Bay Area	<ul style="list-style-type: none"> • This cluster is expected to grow as it expands into areas such as system biology, genomics, and bioinformatics. • The area is well positioned relative to cost, including land and housing prices, compared to the rest of the 	<ul style="list-style-type: none"> • Improve the area’s competitiveness through strategies such as setting up a regional business assistance/promotional center, and addressing transportation and housing cost issues. 	Report was just released, and partners organizations will begin following up on the 60 recommendations, which include more targeted sub-regional recommendations.	Consider a focus on this industry sector for the upcoming planning cycle, in concert with the California Workforce Investment Board, which has been approached by the industry for assistance with training and

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Tapan Munroe et. al. for Bay Area Bioscience Center, Economic Development Alliance for Business, Contra Costa Economic Partnership, Solano Economic Development Corp, EastBAY WORKS and county human services departments. (www.bayareabioscience.org)	Bioscience Center commissioned this study of the fast growing biotechnology industry cluster in this region. The study analyzed the structure of the industry, its employment base, growth prospects, impediments to growth, and opportunities for sustaining the industry. Job opportunities, workforce qualifications and availability of training and education programs are assessed. Two objectives are to develop supportive public policies and develop workforce strategies for local residents.	<p>Bay Area. “Biotech friendly” attributes also include proximity to major research centers, relatively affordable space cost, and a skilled workforce.</p> <ul style="list-style-type: none"> • In a competitiveness analysis, the area compares favorably with other competing regions on factors like research facilities and cost considerations, poorly in workforce except for higher education levels, relatively low on infrastructure, and rather low on financial resources. Many regions are competitive and this area cannot be complacent. • Cost considerations are very important for manufacturing plants but not so for R&D facilities and start-ups. For the latter, primary site location factors are existence of a critical mass of biotech companies and proximity to major research universities. Traditional economic development incentives are a marginal inducement for them. Quality of life factors of important. 	<ul style="list-style-type: none"> • Support local research and commercialization of new technologies, monitor emerging technologies, improve the regulatory environment, improve networking and mentoring, and identify and develop funding sources for firms. • Encourage formation of new biotech firms, including development of a Bioscience Incubator(s). • Support the growth and expansion of biotech firms within the region, including facilitating the clustering of newly formed companies through the construction of appropriate facilities around research institutions or in science and technology research parks. • Improve and expand workforce training programs, including management skills, and improve communication between industry and local schools. 		skills upgrading.